

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
29 December 2004 (29.12.2004)

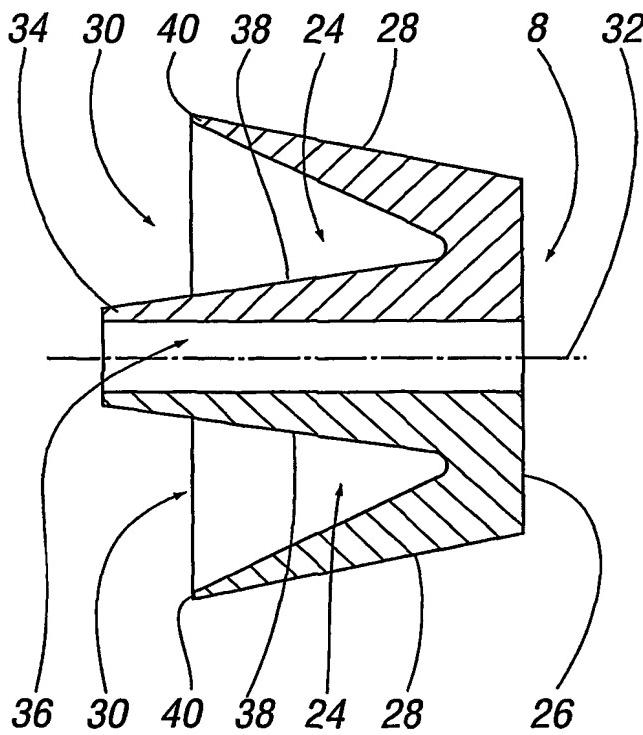
PCT

(10) International Publication Number  
**WO 2004/112972 A1**

- (51) International Patent Classification<sup>7</sup>: **B05B 13/06, 3/10, F16L 55/1645**
- (21) International Application Number: **PCT/GB2004/002513**
- (22) International Filing Date: **14 June 2004 (14.06.2004)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data: **0313883.1 16 June 2003 (16.06.2003) GB**
- (71) Applicant (*for all designated States except US*): **HUNTING INDUSTRIAL COATINGS LTD [GB/GB]**; Derby Road, Widnes, Cheshire WA8 9ND (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (*for US only*): **WHITTLE, Neil [GB/GB]**; Hunting Industrial Coatings Ltd, Derby Road, Widnes, Cheshire WA8 9ND (GB).
- (74) Agent: **BAILEY WALSH & CO LLP**; 5 York Place, Leeds LS1 2SD (GB).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: DISPENSING APPARATUS



(57) Abstract: Dispensing apparatus (2) is provided for use in dispensing a fluid lining material onto the interior wall surfaces of a conduit. The dispensing apparatus (2) includes at least one reservoir for the containment of at least one fluid, dispensing outlet means (6) communicating with said at least one reservoir for dispensing fluid therefrom and a rotational head member for directing the dispensed fluid from said dispensing outlet means in a required direction onto the walls of the conduit. The rotational head member has an opening which faces the remainder of the apparatus and said head member is capable of undergoing reciprocal motion relative to a further part of the apparatus in use to allow multiple layers of fluid lining to be provided in a single pass of the apparatus through the conduit. A directional member is provided in the recess portion and fluid dispensed from said dispensing outlet means impacts initially with an outer surface of said directional member prior to flowing out of said recess portion.



**Published:**

— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*